



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/529,010 | 11/22/2000 | Andreas Voigt | 051480-5017 | 1235 |
| 31625 | 7590 | 10/22/2004 | EXAMINER | |
| BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039 | | | DOUGHERTY, THOMAS M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2834 | |

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,010

Applicant(s)

VOIGT ET AL.

Examiner

Thomas M. Dougherty

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 4-10 is/are allowed.
- 6) ☒ Claim(s) 3 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

The Applicants arguments filed February 18, 2004, concerning claims 1, 2 and 4-10 are moot as these claims are allowed in this office action.

Applicant's arguments filed February 18, 2004 concerning the remaining claims have been fully considered but they are not persuasive. The contention that Tashiro relates to a "different technical field and is, therefore, not pertinent in the art of the present invention" is disputed. Tashiro et al. show a hollow body which is what these claims are entirely drawn to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 3, 13, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tashiro et al. (US 6,494,288). Tashiro et al. show a hollow body for biasing a piezoelectric element, the hollow body being made elastic wherein the hollow body is provided with holes which are of a dumb-bell shape and run transversely of the hollow body's axis.

The holes are arranged in rows one above the other, the holes of the rows being laterally offset from one another.

Art Unit: 2834

The minimum distance between adjacent holes of two rows is one or three times the wall thickness of the hollow body.

The hollow body is made of spring steel and the holes are punched.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. (US 6,494,288) in view of Montgomery (US 5,166,908). Given the invention of Tashiro et al. as noted above, they do not show their holes uniformly distributed over the circumference of the hollow body.

Montgomery shows his holes uniformly distributed over the circumference of the hollow body.

Montgomery does not show dumbbell shaped holes.

It would have been obvious to one having ordinary skill in the art to have dumbbell shaped holes in the device of Montgomery such as is shown by Tashiro et al. since this shape provides for flexing of the structure, as noted by Montgomery, thereby allowing it to be subject to a greater variety of motion which provides additional structural protection to the device.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. (US 6,494,288). It is not clear how the Tashiro device is made. How

Art Unit: 2834

the device was made however is not germane to the patentability of the invention since other means of making the device result in a similar structure. Therefore, this carries no patentable weight.

Allowable Subject Matter

Claims 1, 2 and 4-10 are allowed.

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the prior art fails to show or fairly suggest use of contact pins arranged along a piezoelectric actuator in conductive connection with the actuator wherein the actuator is located in a hollow body that is elastic and which biases the actuator and further wherein the hollow body is joined tensionally and/or positively to the upper and lower end of the actuator, and the hollow body further has dumbbell shaped holes in it and these run transversely to the axis of the hollow body.

Additionally the prior art fails to show or fairly suggest dumbbell shaped holes in a hollow body intended to hold an actuator in which marginal areas around the holes are at least partially compressed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2834

Conclusion

This is a RCE of applicant's previous application. All non-allowed claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Direct inquiry to Examiner Dougherty at (571) 272-2022.

tmd
tmd

September 17, 2004


THOMAS M. DOUGHERTY
PRIMARY EXAMINER
GROUP 2100